

REMARKS

Claims 1-32 are pending. In view of the following, all of the claims are in condition for allowance. If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a teleconference with the Applicant's attorney to further the prosecution of the application.

Rejection of claims 1-32 Under §102(e) as being anticipated by Hull et al. (US 6,262,857)

Claim 1

Claim 1 recites a servo wedge located at the beginning of a disk sector and operable without a zero frequency field to identify the sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector.

For example, referring, e.g., to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, a servo wedge 22 includes a preamble 74, a servo synchronization mark (SSM) 76, head-location identifier 78 and bursts 84a-84n. A servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74, searches for the SSM 76 within a predetermined time window, and then recovers the location identifier 78 which a head-position circuit 214 uses to determine an initial position of a read-write head 32. In this way, the direct detection of a first servo wedge 22 provides both an initial head position on disk spin-up and a head position during a read or write operation. As a result, the disk's data-storage capacity can be increased by reducing the number of, or altogether eliminating, spin-up servo wedges.

Hull et al., on the other hand, does not disclose, teach or suggest a servo wedge operable without a zero frequency field to identify a disk sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector. Hull et al., at, e.g., FIGS. 3A and 6 and the corresponding disclosure, discloses a disk drive that uses servo track segments 68, where each servo track segment 68 includes a servo address mark (SAM) 72. A SAM detector 376 is used to distinguish the SAM 72 from other data stored on the disk 14. However, the SAM detector 376 cannot locate the SAM 72 (and hence, the servo track segment 68) during an initial positioning of a read-write head 20 without first detecting a predetermined "bit pattern" that "violates the run length constraints used to record all other data recorded on disk 14" (Col. 31, lines 3-5). Specifically, this bit pattern includes "a string of from 9-15 consecutive zeros" (Col. 31, lines 11-13). Such a "string of consecutive zeros" is also known in the art as a dc erase field or a zero frequency field. After reviewing Hull et al. in its entirety, Applicants' attorney is unable find any mention of a servo wedge operable without a zero frequency field to identify a disk sector in both an initial positioning of a read-write head and during a read or write operation.

Claims 3, 5, 8, 14, 20, 25, 29 and 32

Claims 3, 5, 8, 14, 20, 25, 29 and 32 are patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claims 2, 4, 6-7, 9-13, 15-19, 21-24, 26-28 and 30-31

Claims 2, 4, 6-7, 9-13, 15-19, 21-24, 26-28 and 30-31 are patentable by virtue of their respective dependencies from independent claims 1, 3, 5, 8, 14, 20, 25 and 29.

Conclusion

In light of the foregoing, claims 1-32 are in condition for allowance, which is respectfully requested.

In the event additional fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner contact the Applicants' attorney, Paul Rusyn, at (425) 455-5575.

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Respectfully submitted,

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